CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

QC ABSTRACT

Nameof Work: :Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

SI. No.	Item	Quantity As Per BOQ	Required No's of testes as per frequency	Actual No's of testes as per frequency	Testes Results
1	1:3:6	65.13 Cum	1	1	Pass
2	Steel	9.02 Tonne	1	1	Pass
3	M20	150.3 Cum	7	7	Pass
4	Slab (100mm)	400.8 Sqm	1	1	Pass

Cubes

0-5 Cum	1Set
6-15 Cum	2Set
16-30 Cum	3Set
31-50 Cum	4Set
Add 1set for extra 50Cum	

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

AB-14

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 05.08.2023

TEST REPORT ON CEMENT

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of Work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID: : Cement (Birla Super 53 grade OPC)

Sample Supplied by: : AGENCY

Date of Manufacture: : July - 2023

Date of Testing 03.08.2023 to 05.08.2023

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 269:2015
1	a) Initial Setting Time	IS-4031 (Part - 5):1988(RA 2014)	130 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part - 5):1988(RA 2014)	340 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) :1988 (RA 2014) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	30.00%	-

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30days from the date of testing.

AE-14

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date : 05.08.2023

TEST REPORT ON FINE AGGREGATES (SAND)

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of Work :Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Date of Testing : 05.08.2023

IS Code : IS 383:2016

: IS 2386 (Part 1):1963(RA 2011)

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	89	8.90	8.90	91.1	90-100
2.36	126	12.60	21.50	78.5	75-100
1.18	182	18.20	39.70	60.3	55-90
600 Micron	165	16.50	56.20	43.8	35-59
300 Micron	256	25.60	81.80	18.2	8-30
150 Micron	138	13.80	95.60	4.4	0-10

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at the site.
3. Any Query regarding the report must be reported within 30days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date : 05.08.2023

TEST REPORT ON COARSE AGGREGATES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of Work :Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Date of Testing : 05.08.2023

IS Code : IS 383:2016

: IS 2386 (Part 1):1963(RA 2011)

Material : 20mm Aggregates

Total Wt. of Aggregates in gms= **5000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
40	0	0	0	100	100
20	189	3.8	3.8	96.2	95-100
10	2436	48.7	52.5	47.5	25-55
4.75	1958	39.2	91.7	8.3	0-10

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at the site.
3. Any Query regarding the report must be reported within 30days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date : 05.08.2023

TEST REPORT ON COARSE AGGREGATES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of Work :Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Date of Testing : 05.08.2023

IS Code : IS 383:2016

: IS 2386 (Part 1):1963(RA 2011)

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **15000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	195	1.30	1.30	98.70	95-100
20	8263	55.09	56.39	43.61	30-70
10	3256	21.71	78.09	21.91	10-35
4.75	2821	18.81	96.90	3.10	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at the site.
3. Any Query regarding the report must be reported within 30days from the date of testing.

2013-14

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date : 05.08.2023

TEST REPORT ON FINE AGGREGATES (SAND)
IS 2116-1980

Client :**Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of Work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Date of Testing : 05.08.2023

Material : Sand - Masonry Total wt. of aggregates in gms = **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits as per IS 2116-1980
4.75	0	0.00	0.00	100.0	100
2.36	14	1.40	1.40	98.6	90-100
1.18	38	3.80	5.20	94.8	70-100
600 Micron	84	8.40	13.60	86.4	40-100
300 Micron	256	25.60	39.20	60.8	5-70
150 Micron	489	48.90	88.10	11.9	0-15

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at the site.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

AB-14

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date : 07.08.2023

TEST REPORT OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency :**Sri. Umesha H C,** Contractor, Bangalore.

Name of Work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Steel Dia/Length : 8mm, 10mm, 12mm" TMT"

Reference to BIS codes : IS 1786:2008(RA 2013) High Strength Deformed Steel Bars and Wires for Concrete Reinforcement-Specification

: IS 1608:2005 Metallic Materials- Tensile Testing at Ambient Temperature

Date of test : 07.08.2023

S.No	Brand	Nominal size (dia in mm)	Mass per meter (kg/meter)	TENSILE STRENGTH			
				0.20 % proof stress/ yield stress (N/mm^2)	Tensile strength (N/mm^2)	TS/YS ratio	Elongation , percent on gauge length
1	TMT	8	0.396	538	616	1.14	13
2	TMT	10	0.618	546	626	1.15	15.5
3	TMT	12	0.889	559	646	1.16	17

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 14.08.2023

PRECAST SLAB 100mm Thick(CORE) TEST REPORT

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Contractor : **Sri. Umesha H C,** Contractor, Bangalore.

Name of Work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

No.of Sample Tested : 03

Date of Testing : 14.08.2023

Techinical Reference : IS:516-1959 (Reaffirmed 1999), SP-24:1983.

Grade of Concrete : M15

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	81.00	0.375	2357.85	1.62	0.959	25.81	13.14	14.20	13.61	17.02
2	50.00	83.00	0.389	2386.94	1.66	0.963	24.70	12.58	13.59	13.09	16.36
3	50.00	85.00	0.399	2390.69	1.70	0.968	25.60	13.04	14.08	13.62	17.03

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at the site.
3. Any Query regarding the report must be reported reported within 30 days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 31.08.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	31.08.2023	8.136	336.3	14.95
2	24.08.2023	31.08.2023	8.165	346.5	15.40
3	24.08.2023	31.08.2023	8.146	352.8	15.68

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AR-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 21.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	21.09.2023	8.165	505.2	22.45
2	24.08.2023	21.09.2023	8.158	516.3	22.95
3	24.08.2023	21.09.2023	8.172	524.3	23.30

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 21.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	21.09.2023	8.175	488.5	21.71
2	24.08.2023	21.09.2023	8.188	506.2	22.50
3	24.08.2023	21.09.2023	8.169	519.3	23.08

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 31.08.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	31.08.2023	8.165	335.2	14.90
2	24.08.2023	31.08.2023	8.132	346.5	15.40
3	24.08.2023	31.08.2023	8.146	352.8	15.68

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 31.08.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	31.08.2023	8.125	345.2	15.34
2	24.08.2023	31.08.2023	8.148	343.5	15.27
3	24.08.2023	31.08.2023	8.152	347.8	15.46

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 21.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	21.09.2023	8.185	501.3	22.28
2	24.08.2023	21.09.2023	8.184	507.2	22.54
3	24.08.2023	21.09.2023	8.179	514.3	22.86

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 21.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	21.09.2023	8.178	505.2	22.45
2	24.08.2023	21.09.2023	8.182	516.3	22.95
3	24.08.2023	21.09.2023	8.165	488.9	21.73

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 31.08.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.08.2023	31.08.2023	8.135	335.3	14.90
2	24.08.2023	31.08.2023	8.128	348.9	15.51
3	24.08.2023	31.08.2023	8.146	356.0	15.82

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 22.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.08.2023	22.09.2023	8.165	506.3	22.50
2	25.08.2023	22.09.2023	8.128	498.6	22.16
3	25.08.2023	22.09.2023	8.146	519.6	23.09

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 01.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.08.2023	01.09.2023	8.136	336.3	14.95
2	25.08.2023	01.09.2023	8.158	362.5	16.11
3	25.08.2023	01.09.2023	8.172	346.5	15.40

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 22.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.08.2023	22.09.2023	8.174	502.3	22.32
2	25.08.2023	22.09.2023	8.166	516.3	22.95
3	25.08.2023	22.09.2023	8.158	479.6	21.32

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 01.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.08.2023	01.09.2023	8.168	336.3	14.95
2	25.08.2023	01.09.2023	8.184	346.5	15.40
3	25.08.2023	01.09.2023	8.155	352.8	15.68

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 01.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.08.2023	01.09.2023	8.165	335.3	14.90
2	25.08.2023	01.09.2023	8.133	346.5	15.40
3	25.08.2023	01.09.2023	8.148	352.8	15.68

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

83/AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/UHC/W No.14/2023-2024 Date: 22.09.2023

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Sri. Umesha H C,** Contractor, Bangalore.

Name of the work : Improvements to Roads and Drains at Narasipura Layout in Ward No 14 (Vidyaranyapura).BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.08.2023	22.09.2023	8.178	526.3	23.39
2	25.08.2023	22.09.2023	8.165	508.2	22.59
3	25.08.2023	22.09.2023	8.154	516.3	22.95

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples collected at site
3. Any Query regarding the report must be reported within 30 days from the date of testing.

183 AB-14

For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

No. 01, Satvika Nilaya, Opp. Widia Poorna Prajna School,